

BIBLIOGRAPHY

C. FITZHUGH TALMAN, in Charge of Library

RECENT ADDITIONS

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

Abbott, C. G., & Aldrich, L. B.

Improved water-flow pyrheliometer and the standard scale of solar radiation. Washington. 1932. 8 p. pl. 24½ cm. (Smith. misc. coll. v. 87, no. 15.)

Ali, Barkat, & Naqvi, S. N.

Correlation between frost and the preceding meteorological conditions. p. 671-694. figs. 25 cm. (Indian journ. agric. sci., v. 1, pt. 6, Dec., 1931.)

Bossolasco, M.

Il secondo anno polare internazionale 1932-1933. 8 p. 24½ cm. (Boll. del. com. naz. ital. geod. e geof. 2da. ser., anno 2, N. 2. Feb., 1932. X.)

Sulle masse d'aria della troposfera. 12 p. figs. 24½ cm. (Boll. com. naz. ital. geod. e la geof. 2da. ser., anno 2, N. 7. Lug., 1932. X.)

Gavilán y Anillo, Alfonso Reyes.

Moderno tratado sobre los ciclones. "Ampliación corregida al compendio." n. p. [1932.] 31 p. 15 cm.

Hänsch, Fritz.

Über die 24tägige Welle des Winters 1923/24. Ihr Sitz in der freien Atmosphäre und das Verhalten der einzelnen meteorologischen Elemente. Leipzig. 1932. p. 173-208. pl. 24 cm. (Inaug.-Dissert. Univ. Leipzig.)

Hilgenberg, O. C.

Über die Wirbelringnatur atmosphärischer Erscheinungen, insbesondere der Zyklogen, Antizyklonen und Böen. Berlin. 1932. 14 p. figs. plates (fold.) 24½ cm.

Kidson, E.

Canterbury "northwester." Wellington. 1932. p. 65-75. fig. 25½ cm. (New Zeal. journ. sci. & tech., v. 14, no. 2. 1932.) (Met'l office note no. 12.)

SOLAR OBSERVATIONS

SOLAR RADIATION MEASUREMENTS DURING NOVEMBER, 1932

By IRVING F. HAND, Assistant in Solar Radiation Investigations

For a description of instruments employed and their exposures the reader is referred to the January, 1932, REVIEW, page 26.

Table 1 shows that solar radiation intensities averaged well above normal values at Washington and Madison and slightly below at Lincoln.

Table 2 shows an excess in the total solar radiation received on a horizontal surface at Washington, Lincoln, Chicago, New York, Fresno, and Pittsburgh and a deficiency at all other stations for which normals have been computed.

Table 3 shows low turbidity values for the month as a whole, while the values of November 10 are the lowest recorded in Washington since observations began in February, 1932.

Polarization measurements made at Washington on six days give a mean of 58 per cent with a maximum of 66 per cent on the 10th. At Madison one observation of 67 per cent on the 26th is the only value that may be accepted, due to misadjustment of the polarimeter during the fore part of the month. The Washington values are about normal for November, while the single reading for Madison is about normal for the mean but below the average November maximum.

Loewy, Adolf.

Physiologie des Höhenklimas ... Berlin. 1932. xii, 414 p. illus. diagrs. 21 cm. (Monographien aus dem gesamtgebiet der Physiologie der Pflanzen und der Tiere. 26. Bd.)

Lugeon, Jean.

L'Institut national météorologique de Pologne. Organisation du Bureau central météorologique, observatoire aérologique, observatoire maritime, station magnétique. Varsovie. 1932. 222 p. illus. charts (fold.) 24 cm.

McDonald, W. F.

Study of weather influences on sugar cane production in Louisiana. 38 p. figs. 23 cm. (Planter & sugar manuf., May 29, 1926-July 17, 1926, inclusive.)

Noth, H.

Wetterkunde für Flieger und Freunde der Luftfahrt. Berlin. [c1932.] 75 p. illus. 19 cm. (Klasings Flugtech. Sammlung. Bd. 20.)

Pearson, G. A.

Forest types in the southwest as determined by climate and soil. Washington. 1931. 144 p. illus. 23½ cm. (U. S. Dept. agric. Tech. bull. no. 247. Aug., 1931.)

Shaw, Napier.

Meteorology of yesterday, to-day and to-morrow. p. 393-404. 24½ cm. (Scientia v. 51. 1, 6, 1932.)

Sverdrup, H. U.

Arbeider i luft- og havforskning. Bergen. 1932. 20 p. figs. 24 cm. (Chr. Michelsens inst. for videnskap og åndsfrifet. Beret. II, 5.) [Swedish text, English résumé.] [Ocean meteorology.]

Snedekkets termiske egenskaper. Bergen. 1931. 21 p. 24 cm. (Chr. Michelsens inst. for videnskap og åndsfrifet. Beret. I, 3.) [Swedish text. English résumé.] [Snow. Thermal relations.]

TABLE 1.—*Solar radiation intensities during November, 1932*

[Gram-calories per minute per square centimeter of normal surface]

Washington, D. C.

Date	Sun's zenith distance										Local mean solar time	
	75th mer. time	Air mass					P. M.					
		A. M.				P. M.		P. M.				
e.	e.	5.0	4.0	3.0	2.0	*1.0	2.0	3.0	4.0	5.0	e.	
mm.	mm.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	mm.	
Nov. 3	4.95	0.79	0.92	1.07							4.17	
Nov. 10	4.95	.92	1.07	1.19	1.27	1.37	1.36	1.24	1.08	0.91	4.37	
Nov. 14	3.45										3.81	
Nov. 15	4.57	.76	.92	1.04							4.75	
Nov. 22	2.74	.64	.77	.97							2.74	
Nov. 23	3.45	.42	.74	.97	1.32						3.45	
Nov. 28	1.60		1.00	1.17	1.40						1.52	
Nov. 29	2.06	1.02	1.16	1.33							1.52	
Means		.76	.94	1.11	1.20	(1.37)	(1.36)	1.14	1.03	.85		
Departures	±.00	+.08	+.11	+.02				+.19	+.15	+.11		

Madison, Wis.

Nov. 2	4.17	0.77	0.88								4.17
Nov. 3	4.17			1.05							4.57
Nov. 5	4.57	.78	.96	1.17	1.35						4.17
Nov. 16	1.78		1.13	1.28	1.45						2.36
Nov. 19	1.32					1.34					1.32
Nov. 21	1.60		1.12	1.27	1.40						1.45
Nov. 26	1.68	1.10	1.21	1.35	1.50						1.45
Means		.88	1.06	1.24	1.41						
Departures	±.00	+.05	+.09	+.11				+.03	-.05	-.02	

Lincoln, Nebr.

Nov. 2	4.75				1.27		1.46	1.15	1.07		5.16
Nov. 4	7.04										6.76
Nov. 12	2.36	0.90	1.04	1.23	1.44		1.33				3.45
Nov. 23	3.00							1.34	1.13	.98	3.81
Nov. 30	3.15		.92	1.17				1.38	1.13	(1.02)	3.99
Means		(.90)	(.98)	(1.20)	(1.36)						
Departures	±.00	-.04	+.03	+.02				+.03	-.05	-.02	

*Extrapolated.